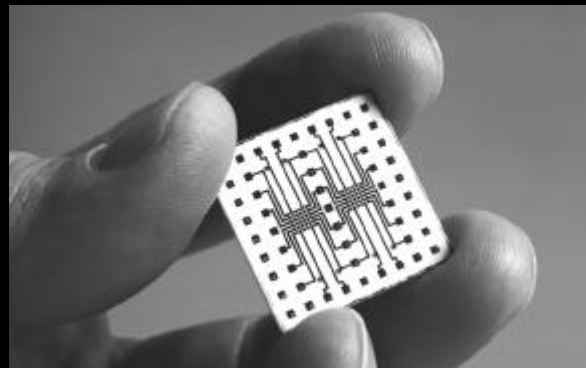


# INVESTMENT MANAGERS TO THE RETIREMENT BOARDS



The following is the roster of investment managers employed by the 106 public retirement boards as of December 31, 1998. The list indicates a broad mix of investment firms with regard not only to asset class but also to the nature of the investment product (separately managed account, commingled funds, mutual funds, et al). There is also wide diversity in terms of the size of the investment management firms as well as their geographical location.

PERAC Investment Regulations, issued in July 1998, are intended to encourage the public retirement boards to exercise their fiduciary responsibilities in a prudent and responsible manner. Boards must file with PERAC a Statement of Investment Objectives. This Statement includes a discussion of investment policies—such as expected asset mix, risk, and diversification—intended to accomplish the investment objectives. In order to discourage excessive investment risk, each board's rate of return objective should not exceed the assumed rate of return in the most recent actuarial valuation by more than 1%. Beyond that, PERAC regulations contain no restrictions as to asset allocation, diversification, or security selection.

A major focus of PERAC Investment Regulations is that retirement boards select their investment managers—as well as investment consultants, custodians, and vendors of other investment-related services—in open, competitive processes. Such processes would typically begin with a Request For Proposal (RFP) placed in appropriate media and would conclude after presentations made to the board

by those managers deemed most qualified and capable. An exemption from investment restrictions under prevailing statutes is not required for managers of domestic equity or fixed income securities.

In order to hire managers for international investments, real estate, or alternative investments, retirement boards request an exemption based on the manager's submission to PERAC of data regarding its investment capabilities and recent performance. Once a manager in these asset classes is approved by PERAC, it is included on PERAC's List of Qualified Investment Managers, updated quarterly. If a board has been granted a previous exemption in a particular asset class, it need not request an exemption in order to retain managers on this list. However, boards may select managers not on this list by following the established basic procedures involving a competitive process and submission of the appropriate documentation regarding the firm.

For all managers, a board must submit to PERAC a competitive process certification, a Vendor Certification outlined in 840 CMR 16.08, and a Disclosure Statement in accordance with 840 CMR 17.04 8(a) and (b).



1838 Investment Advisors  
20th Century Ultra Fund  
Advest, Inc.  
Aeltus Investment Management, Inc.  
AFL-CIO Housing Investment Trust  
AIB Irish Equity Portfolio  
Allegis Congregate Care Fund  
Allegis Real Estate Separate Account (RESA)  
Allegis Realty Investors LLC  
Alliance Capital Management  
Alliance Capital Management Health Sector Fund  
Allmerica Asset Management  
Allmerica Asset Management Core Fixed Income Fund  
Allmerica Select International Equity Fund  
American Express Asset Management  
Amerindo Investment Advisors, Inc.  
ARM Capital Advisors, Inc.  
Ashland Management Materials and Services Sector Fund  
Atlanta Capital Management Company, LLC  
Babson-Stewart Ivory International Fund L.P. III  
Bachow and Associates Fund III  
Back Bay Advisors  
Bank of Ireland Asset Management  
Bank of Ireland Group Trust SAF International Equity Sub Trust  
BankBoston Investment Management, Inc.  
BankBoston Small Cap Fund  
Barrow, Hanley, Mewhinney & Strauss Consumer Non-Durables Sector Fund  
BEA Associates, Inc.  
Beacon Fiduciary Advisors, Inc.  
Bear Stearns Asset Management  
Boston Advisors, Inc.  
Boston Capital Ventures II  
Boston Capital Ventures III  
Boston Company  
Boston Company Active Equity Pooled Fund  
Boston Company International Equity Fund  
Boston Company Premier Value Equity Fund  
Boston Company Small Cap Value Fund  
Boston Financial Management, Inc.  
Boston Millennia Partners, L.P.  
Boston Partners Asset Management, L.P.  
Brandes International Equity Trust  
Brandywine Group Trust Fund  
Brandywine International Value Equity Fund  
Brinson U.S. Bond Fund  
Brinson U.S. Equity Fund  
Carey Institutional Properties Fund  
Cathartes/AEW L.L.C.  
Charles River Partnership VI-A  
Charles River Partnership VII  
Charles River Partnership VIII  
Charles River Partnership IX  
Cohen & Steers Realty Shares, Inc.  
Columbus Circle Investors  
Commonwealth BioVentures Fund IV  
Connecticut Investment Management, Inc.  
Copley Partners I & II  
Corcoran Jennison Apartment Fund  
Crabbe Huson Small Cap Fund  
Cutler & Company LLC  
Daruma Asset Management, Inc.  
David L. Babson & Company  
de Burlo Group  
Dean Witter Realty Yield Plus  
Delaware Investment Advisors  
Delaware Pooled Trust/Global Fixed Income Portfolio  
Diversified Investment Advisors  
DN Partners, L.P.  
Dreman Value Advisors Finance Sector Fund  
Dreyfus EB Core Small Cap Fund  
Eaton Vance Management  
Equitable Real Estate Prime Property Fund  
Equitable Real Estate Value Enhancement Fund  
Equitable Real Estate Value Enhancement Fund II  
Equitable Real Estate Value Enhancement Fund III



## INVESTMENT MANAGERS (CONT.)

Essex Investment Management Company  
EuroPacific Growth Fund  
Evergreen Select Small Cap Growth Fund  
Federated Short Term Income Fund  
Fidelity Capital Appreciation Fund  
Fidelity Contra Fund  
Fidelity Equity Income Fund  
Fidelity Fund  
Fidelity Growth & Income Fund  
Fidelity Magellen Fund  
Fidelity Mid-Cap Portfolio  
Fidelity Real Estate Asset Management II, L.P.  
Fidelity Real Estate Asset Management III, L.P.  
Fidelity Real Estate Fund  
Fidelity Real Estate High Income Fund II  
Fidelity Select Small Cap Commingled Fund  
Fidelity Value Fund  
Fiduciary Trust Small Cap Equity Commingled Fund  
Financial Management Advisors, Inc.  
First America Asia Fund I LLC  
Flagship S&P 500 Index Fund  
Fleet Galaxy Small Cap Value Fund  
Fleet International Equity Fund EB  
Fleet Investment Advisers  
Fleet Small Cap Equity Fund  
Foreign & Colonial Emerging Markets Limited  
Frank Russell Equity I Fund  
Frank Russell Equity II Fund  
Frank Russell International Fund  
Frank Russell Tactical Asset Fund  
Frank Russell Trust Company  
Freedom Capital Management Corporation  
Freedom International Fund  
Gabelli Asset Management  
Galaxy Fund  
Geometry Real Estate LLC  
GFM International Investment Bond Fund #64  
Glickenhau & Company  
Guinness Flight Global Group Trust

Guinness Flight International Equity Group Trust  
Guinness Flight International Fixed Income Trust  
Hallmark Capital Management Capital Goods Sector Fund  
Halpern Denny Fund II, L.P.  
Hambro European Ventures  
Hambro Northern Ireland Venture Partners  
Hancock ForesTree IV  
Hancock ForesTree V  
Harbor Capital Management  
Heitman Advisory Corporation  
Heitman Real Estate Fund V  
Hotchkis and Wiley International Equity Group Trust  
Hutchens Investment Management  
IAI World Fund, LLC  
Income Research & Management, Inc.  
INVESCO Capital Management, Inc.  
INVESCO Global International Equity Fund  
INVESCO Management & Research  
INVESCO Realty Advisors  
INVESCO, Inc.  
Invista Capital Management  
Irish Life International Equity Fund  
IRT Equity Real Estate Securities Fund  
IRT International Equity Fund  
J&W Seligman & Company, Inc.  
J.L. Kaplan Associates  
J.P. Morgan Investment Counsel  
John Hancock Special Equity Fund  
John McStay Investment Counsel  
Julius Baer Government Bond International Portfolio  
Kenwood Group  
Keystone Investment Management Corporation  
L&B 90's Investment Program  
L&B Real Estate Property Fund III  
L&B Real Estate Property Fund IV  
LaSalle Advisors  
Lazard Freres International Equity Fund  
Legg Mason Capital Management



Leonard Management Group  
Liberty Asset Management  
Loomis Investment Grade Bond Fund  
Loomis Sayles & Company, Inc.  
Loomis Sayles Fixed Income Fund  
Loomis Sayles Investment Trust  
Lowe Strategic Opportunities Fund  
MacKay-Shields Financial Corporation  
MAS Fixed Income Portfolio  
MAS Large Cap Value Product  
MassMutual Life Insurance Company  
MassMutual Participation Investors  
Matrix Equity Commingled Fund  
Mellon Russell 1000 Growth Index Fund  
Merrill Lynch Asset Management  
Merrill Lynch Preservation Trust Fund  
MetLife Bond Fund #135  
MetLife Broad Market Fund #41  
MetLife Grand Central Bond Fund  
MetLife Real Estate Series II  
MetLife Tower Fund  
MetLife/State Street Research Growth Equity #40  
MetLife/State Street Research Small Cap Fund #96  
Metric Apartment Co-Investment Trust Fund (MAC Trust)  
Metric Institutional Apartment Fund I  
Metric Institutional Apartment Fund II  
Metric Institutional Realty Advisors  
MFS Bond Fund  
MFS Institutional Advisors, Inc.  
MIG Realty Advisors  
MIG Residential REIT Fund  
Miller Anderson & Sherrerd  
Miller/Howard Investments Utility Sector Fund  
Mitchell Group Energy Sector Fund  
Monitor Clipper Equity Partners, L.P.  
Montgomery Asset Management  
Montgomery Institutional Series: Emerging Markets Portfolio

Montgomery Institutional Series: International Growth Portfolio  
Morgan Grenfell Capital Management  
Morgan Grenfell Global Fixed Income Fund  
Mutual Series Beacon Fund  
National Investment Services of America  
New England Growth Fund I, L.P.  
New England Growth Fund II, L.P.  
NewSouth Capital Management Consumer Durables Sector Fund  
NewSouth Capital Management Transportation Sector Fund  
North Atlantic Venture Fund II  
North Bridge Venture Partners  
North Bridge Venture Partners II, L.P.  
Oechsle International Advisors  
Oppenheimer Capital  
PaineWebber Equity II Fund  
PaineWebber Equity III Fund  
PaineWebber Independent Living Mortgage Fund  
PaineWebber Properties II  
PaineWebber Properties III  
Palmer Organization III L.P.  
PanAgora Asset Management  
PanAgora Bond Index Fund  
PanAgora TAA Equity Fund  
PanAgora U.S. Equity Market Group Trust  
Pension Reserves Investment Trust (PRIT) Fund  
Phoenix Aberdeen International Bond Portfolio  
Phoenix Investment Partners  
Phoenix Real Estate Advisors (RESA)  
Pimco Low Duration Fund  
Pimco Total Return Fund  
Pioneer Ventures, L.P. II  
PRISM Venture Partners I, L.P.  
Public Storage Institutional Fund II  
Putnam Advisory Company  
Putnam Core Growth Equity Fund  
Putnam Core Growth Trust



## INVESTMENT MANAGERS (CONT.)

Putnam Core International Equity Tobacco Free Fund  
Putnam High Yield Managed Trust  
Putnam Horizon Trust  
Putnam International Trust  
Putnam Mid-Cap Equity Portfolio  
Putnam World Income Trust  
QCI Asset Management  
RCM Capital Management Technology Sector Fund  
RhumbLine Advisers  
RhumbLine Extended Market Fund  
RhumbLine Group Trust  
RhumbLine Russell 2000 Index Fund  
RhumbLine S&P 500 Index Fund  
RhumbLine South Africa Free Group Trust  
Rice Mezzanine Lenders III, L.P.  
Richmond Capital Management  
RII Timberland III L.L.C.  
RII Weyerhaeuser World Timberfund, L.P.  
Rowe Price Fleming Foreign Equity Fund  
RREEF America REIT II  
Safety Fund National Bank  
Salomon Brothers Institutional High Yield Bond Fund  
Salus Market Neutral Conservative Investment Fund  
Schroder Real Estate Value Enhancement Fund B L.P.  
Scottish Equitable Invest. Mgmt. Ltd Pooled Trust-Int'l  
Equity Inv Fund  
Scudder Investor Services  
Sector Plus Group Trust  
Seix Investment Advisors  
Seligman Henderson Group Trust  
Senior Tour Players Fund I  
Sentinel Realty Partners II  
Sentinel Realty Partners III  
Sentinel Realty Partners IV  
Shurgard Institutional Fund L.P. I  
Shurgard Institutional Fund L.P. II  
Sirach Capital Management  
Smith Barney Collective Trust Fund-International Equity  
Subfund

Smith Barney International Equity Collective Trust  
Sogen Overseas Fund  
SSGA Equal Weighted S&P 500 Index Fund  
SSGA International Growth Opportunities Fund  
SSGA/Freedom Equity Style Fund  
SSR Apartment Value Fund, L.P.  
Standard Asset Group  
Standish Equity Fund  
Standish Fixed Income Fund  
Standish International Equity Fund  
Standish International Fixed Income Fund  
Standish Short-Term Asset Reserve Fund  
Standish Small Equity Fund  
Standish, Ayer & Wood  
Standish, Ayer & Wood Fixed Income Fund  
State Street Bank and Trust  
State Street Bond Market Index Fund  
State Street Daily Active Developed Markets Fund  
State Street Daily Bond Market Fund  
State Street Daily Government Corporate Fund  
State Street Global Advisors Balanced Growth Fund  
State Street Global Advisors International Index Fund  
State Street Global Advisors S&P 500 Index Fund  
State Street Global Matrix Small Cap Fund  
State Street Government Corporate Bond Fund  
State Street Growth Equity Fund #40  
State Street Intermediate Bond Fund  
State Street International Fixed Income Fund  
State Street International Index Fund  
State Street Matrix Small Cap Fund  
State Street Passive Emerging Markets Fund  
State Street REIT Fund  
State Street Research & Management Company  
State Street Russell 1000 Growth Index Fund  
State Street Russell 1000 Value Fund  
State Street Russell 2000 Growth Fund  
State Street Russell 2000 Value Fund  
State Street S&P Midcap Fund  
State Street Short Term Bond Fund



Stein Roe & Farnham, Inc.  
Strategic Active Management Bond Fund  
Strategic Active Management Stock Fund  
Strategic Fixed Income, L.P.  
T. H. Lee Equity Partners, L.P.  
T. Rowe Price Small Cap Stock Fund  
TA Realty Associates Fund III  
TA Realty Associates Fund IV  
Taylor Investments  
Templeton Foreign Equity Series Fund  
Templeton Foreign Fund  
Templeton Investment Counsel, Inc.  
Thomas H. Lee Equity Advisors IV, LLC  
Thompson, Siegel & Walmsley  
Ticonderoga Partners III  
Ticonderoga Partners IV  
Triumph Partners III, L.P.  
Trust Fund Investment Advisors  
U.S. Trust Company  
UNC Capital, L.P.  
Union Labor Life Small Cap Equity Account, Separate  
Account E  
United Investment Counsel  
Van Kampen Merritt Management, Inc.  
Warburg Pincus Counsellors, Inc.  
Warburg Pincus International Equity Fund  
Washington Mutual Investors Fund  
Weiss, Peck & Greer Corporate Development IV, L.P.  
Wellington Collective Investment Fund Research Equity  
Fund  
Wellington Collective Investment Fund Small Cap 2000  
Wellington Domestic Core Bond Portfolio  
Wellington International Bond Pool Portfolio  
Wellington International Stock Fund  
Wellington Management Company  
Wellington Management Company Strategic Total Return  
Bond Portfolio  
Wellington Management Strategic Total Return  
Collective Inv. Fund

Wellington Mgmt. U.S. High Yield Port./International  
Bond Pool Port.  
Wellington Mid Cap Portfolio  
Wellington Small Cap Portfolio  
Wellington Trust Company Collective Investment Fund  
International Bond Portfolio  
Wellington Trust Company High Yield Bond Portfolio  
Wellington Trust Company International Stock Portfolio  
Wellington U.S. High Yield Portfolio  
Wilshire Asset Management  
World Asset Management S&P 500 Fund  
Wright International Blue Chip Fund  
Wright Investors' Service  
Zak Capital, Inc.  
Zero Stage Capital V, L.P.  
Zero Stage Capital VI, L.P.  
Zevenbergen Capital